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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/557,758 | 11/17/2005 | Gregory L. Branch | 110120.402 | 1471 |
| 31740 7590 05/11/2009 THOMAS LOOP | | | EXAMINER | |
| P.O. BOX 214 | 66 | | LEE, EDMUND H | |
| SEATTLE, WA 98111 | | | ART UNIT | PAPER NUMBER |
| | | | 1791 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/557,758 BRANCH ET AL. Office Action Summary Examiner Art Unit EDMUND H. LEE 1791 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 06 April 2009. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 15-18.23-25 and 28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 15-18,23-25 and 28 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

| Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing 3) Information Disclosure Statement(s) (PTO-892) | Review (PTO-948) | ew Summary (PTO-413) No(s)Mail Date of Informal Pater Lapplication |
|---|-----------------------|--|
| Paper No(s)/Mail Date | 6) Other: | <u> </u> |
| S. Patent and Trademark Office PTOL-326 (Rev. 08-06) | Office Action Summary | Part of Paper No./Mail Date 20090507 |

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DETAILED ACTION

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/6/09 has been entered.
- 2. Claims 15-18,23-25, and 28 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Limiting foaming during contact with the thermoforming die to a small percentage (2% to 30%) is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The instant disclosure clearly recites the importance of allowing only a small percentage of foaming (2% to 30%) to take place during contact with the thermoforming die in order to create better detail, save energy, and reduce cycle time. See pg 22, Ins 1-17 of priority provisional application 60/471477.
- Claims 15-18,23-25, and 28 are rejected under 35 U.S.C. 112, second
 paragraph, as being indefinite for failing to particularly point out and distinctly claim the
 subject matter which applicant regards as the invention.

The phrase "thermoforming-foaming...into the shaped article of manufacture" (cl 12, lns 15-16) is indefinite because it is confusing as to whether or not the Application/Control Number: 10/557,758 Page 3

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thermoforming-foaming occurs in a single thermoforming mold. If so, please insert the phrase --while in a thermoforming mold-- after "thermoforming-foaming" (cl 15, In 15).

Correction is required.

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following teach the state of the art: US 20090104420 and EP 371392.
- Any inquiry concerning this communication or earlier communications from the
 examiner should be directed to EDMUND H. LEE whose telephone number is
 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY
 FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571.272.1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE Primary Examiner Art Unit 1791

EHL

/EDMUND H. LEE/ Primary Examiner, Art Unit 1791